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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,483	02/22/2002	Robert Farr	F3284(C)	1491

201 7590 01/27/2006

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EXAMINER

MADSEN, ROBERT A

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,483

Applicant(s)

FARR ET AL.

Examiner

Robert Madsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-19 is/are pending in the application.
- 4a) Of the above claim(s) 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1 and 3-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment filed November 2, 2005 has been entered. Claims 1, 3-19 remain pending in the application. Claim 19 was withdrawn from further consideration for being directed to a non-elected invention.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1,3,5-8,15,16 are rejected under 35 U.S.C. 102(b) as being anticipated by Frutin (WO 9836671) as evidenced by Rudick (US 5135137).

4. Frutin teaches a frothed beverage that include a sparingly soluble effervescence inducing gas, such as nitrogen, nitrous oxide, or carbon dioxide providing a head space that occupies 10-80% of the container at a pressure of at least 2.5 (e.g. 55 psi up to 120 psi) at 5°C , that is held in a container with an aerosol valve that is biased closed, which would prevent opening when inverted. The pressure in the head space above the liquid in the container is sufficient to cause the beverage to be discharged into the mouth of the consumer, since 55 psi is capable of forcing the product to be discharged(Page 1, lines 1-10, Page 2, line 36 to Page 4, line7, Page 4, lines 19-26,Page 5, line 1to Page 6, line 15, Page 8, lines 13-26, Page 12, lines 22-34, Page 18-20).

5. Furthermore, with respect the recitation: "the valve is *one which is designed to be* opened via the consumer's mouth", this limitation implies an *intended manner of operating* of operating the valve. As stated in MPEP 2114, the manner of operating the

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device does not differentiate apparatus claim from the prior art: A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Frutin teaches the valve is suitable for dispensing whipped cream and may be a tilt valve (Abstract, Page 4, lines 5 and 6). While Frutin does not explicitly teach the tilt valve is designed to be opened via the consumer’s mouth, as evidenced by Rudick, a tilt valve design suitable for dispensing whipped cream and pressurized beverages is also a design capable of being opened via a consumer’s mouth or finger (See Figure 5, lines 4-7,27-35,64-66, and Abstract).

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) as evidenced by Rudick (US 5135137) as applied to claims 1,3,5-8,15,16 further in view of Kohler et al. (US 5143288).

8. Frutin teaches an aerosol valve and teaches features may be provided to urge remaining beverage in the container, which may have become effervescent, out of the container (Page 4, lines 19-26), but is silent in teaching a dip tube that urges the effervescent fluid out of the container, as recited in claim 12, with holes that communicate with the headspace as recited in claim 13.

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9. Kohler et al. also teach aerosol valves for a container comprising a liquid and nitrogen system at similar pressures (e.g. up to 120 psi), and teach that one can maintain a constant pressure to urge the material out of the container, even as the level reaches the bottom of the container, by providing a dip tube with a hole in communication with the headspace of the container. Kohler et al. teach the desired discharge pressure is maintained by allowing gas residing in the headspace to mix with the liquid as it travels up the dip tube, and that the actual location depends on the desired discharge consistency (Column 1, line 49-67, Column 3, lines 5-55, Column 5, line 50 to Column 6, line 35). Therefore, it would have been obvious to include a hole in communication with the headspace of the container of Frutin since Frutin teaches providing features to urge a remaining nitrogen effervesced beverage out of the container using an aerosol valve, and Kohler et al. providing an aerosol valve with a dip tube with a hole in communication with the headspace of a container will assure that one could urge all of the liquid out of the container and a more consistent amount of gas, such as nitrogen, is mixed with liquid.

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) in view of Kohler et al. (US 5143288) as applied to claims 12 and 13 above, further in view of Berg Jr. et al. (US 3947567).

11. Frutin teaches the amount of gas discharged with the liquid when the effervesced liquid is expelled depends on the size of the headspace and the pressure of the gas in

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the headspace (Page 20, lines 17-19_. However, Frutin is silent in teaching any particular amount of gas discharged with the liquid .

12. Berg et al. also teach compositions for forming effervescent liquids . In explaining the particular desired degree of effervescence for products of Berg et al., Berg et al. teach the conventional effervescent beverage is 1 volume of gas per volume of liquid. (Column 4, line 39 to Column 5, line 16, Column 5, lines 62-66, Column 6, lines 5-53, and Column 6, line 62 to Column 7, line 4). Therefore, it would have been obvious to further modify Frutin such that the volume ratio of gas to liquid is at least 0.5 to 1 when the beverage is expelled since Frutin teaches one may adjust the head space and pressure to provide a desired gas to liquid ratio for the expelled beverage and Berg teaches the conventional effervescent beverage has a gas to liquid volume ratio is 1:1.

13. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) as applied to claims 1,3,5-8,15,16 further in view of (Frutin WO 97/21605)

14. Frutin '671 teaches the container may be fitted with a device which injects flavor into the container (Page 13, line 33 to Page 14, line 5), such as a modified version of Frutin '605 (Page 6, lines 6-15), and Frutin '605 teaches including a container a supplemental compartment with a sparingly soluble effervescence inducing gas and a liquid that releases the contents upon opening the container, or relieving the pressure within the container (Page 4, lines 16-23, Page 14, lines 23-36, and the embodiments of 16-18). Therefore, it would have been obvious to modify Frutin '671 and include a

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widget for releasing the gas and a flavor when the valve is opened, since Frutin '671 teaches this may be done using a modified container of Frutin '605, and Fruitn'605 teaches widgets for a container to supply a sparingly soluble effervescence inducing gas and a flavor liquid upon releasing the pressure within the container.

15. Claims 1,4,9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 5747079) in view of Denton et al. (US 5971357).

16. Regarding claims 1,4, 9, 10,Hoffman teaches an oxygenated beverage, which is effervescent (i.e. oxygen saturated similar to carbon dioxide saturated beer and sparkling wine), wherein the beverage is tea, coffee, root beer, or water, held in a container at 2-6 atmospheres, can reduce or control halitosis, and may be taken via ingestion or spraying, which would involve a valve structure (Column 2, lines 20-65, Column 3, line 10 to Column 4, line 67) . Hoffman is silent in teaching the particular temperature at which the beverage is stored and that the valve structure is *one which is designed to be* opened via the consumer's mouth as recited in claim 1, such as with an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing as recited in claim 10.

17. With respect to the recited valve structure, Denton et al. teach it is advantageous to provide an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing when a person is required to keeps both hands free to do something else. Denton et al. teach such an actuator/valve combination that is easy to use, inexpensive, does not leak , and can be used in combination with a

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variety of pressurized containers(Column 1, lines 10-43, Column 2, lines 10-41, column 4, lines 41-59, Column 6, lines 29-41, Column 7, lines 5-27). Therefore it would have been obvious to include an actuator to opens the valve that is designed being opened by a user's mouth or teeth for dispensing since Denton et al. teach an bite actuator/valve combination that is easy to use, inexpensive, does not leak, can be used in combination with a variety of pressurized containers, and offers the advantaged of allowing a person to keeps both hands free to do something else while consuming a beverage.

18. With respect to the particular temperature in combination with the 2-6 atmospheres pressure, Hoffman teaches the amount of oxygen dissolved at a given pressure depends on the particular temperature of the container and the amount of oxygen dissolved affects the ability of the beverage to control or eliminate halitosis , as well as the stored beverage's own susceptibility to microbial growth (Column 2, line 45 to column 3, line 7, Table 1). Therefore, it would have been obvious to select any particular storage temperature between 5-15°C, depending on (1) the type of beverage (e.g. root beer, which is normally chilled), (2) the desired level of oxygenation and effectiveness at controlling halitosis as compared to the amount of microbial risk.

19. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 5747079) in view of Denton et al. (US 5971357), as applied to claims 1,4,9, and 10 above, further in view of Bergman (SE9801752 A).

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20. Modified Hoffman is silent in teaching a button on the bite valve to consume the beverage, which may be tea, coffee, water, or root beer.

21. Bergman teaches a water dispensing valve operated by biting, but additionally utilizes a button to control the amount dispensed based on the bite pressure applied to the button (English Abstract). Therefore, it would have been obvious to modify Hoffman and include a button on the bite-valve, since Bergman teaches this provides a means for controlling the dispensing amount by bite pressure and one would have been substituting one conventional bite-valve for another for the same purpose: dispensing water.

Response to Arguments

22. Applicant's arguments filed November 2, 2005 have been fully considered but they are not persuasive.

23. Applicant asserts that Frutin '671 does not suggest the discharge of a liquid beverage from a container into the mouth of a consumer from a dispenser wherein the liquid is an effervescent fluid as applied to the rejections made under 35 U.S.C. 102(b), but, instead, Frutin '671 teaches the liquid is a foamed product dispensed from a serrated nozzle with sharp notches or teeth that would cause injury.

24. With respect to an effervescent fluid, as stated in the previous office action, Gruenewald (US 4993599) was provided as evidence that the art recognizes the beverage of Frutin '671 to be effervescent (See Column 1, lines 34-48).

25. With respect to the design of the valve, claim 1 recites “the valve is *one which is designed to be* opened via the consumer’s mouth”, but it does not recite “the discharge of a liquid beverage from a container into the mouth of a consumer”. The limitation is an intended manner of use, and, as explained in the rejection made under 35 U.S.C.

102(b) above, the structure taught by Frutin ‘671 (a tilt valve designed for dispensing whipped cream and used as a pressurized beverage dispensing valve) is a structure that is designed to be opened, or is capable of being opened, via the consumer’s mouth.

26. With respect to the sharp notches in the nozzle that would cause injury, Frutin ‘671 shows a serrated nozzle, but does not explicitly state these are *sharp* notches or suggest that they might cause injury.

27. Applicant further asserts, with respect to the rejections of claims 12 and 13 made under 35 U.S.C. 103(a), that Frutin is directed to a froth liquid and not an effervescent liquid. First, it is noted that the dispensed beverage of Frutin includes dissolved nitrous oxide after dispensing and from dissolved nitrous oxide, or mixtures of other gases, inside the beverage prior to dispensing (See Page 4, lines 13-22 and Page 4, line 35, Page 5, lines 1-20, Page 8, lines 23-26, and Page 12, lines 22-34). Second, Frutin teaches an “effervescent liquid”, as stated in previously, because the prior art (Gruenewald ‘599) recognizes the beverage of Frutin as effervescent (See column 1, lines 34-38 of Gruenewald). Thus, Frutin meets the valve is “openable to enable the beverage to be dispensed from the container and in which the beverage have a sparing soluble effervescence inducing gas dissolved therein”.

28. Applicant further asserts with respect to claims 12 and 13, the beverage requires negative pressure to consume the liquid via a straw and that nothing is consumed under pressure. However, Frutin is not limited to utilizing a straw for negative pressure, and the embodiment relied on in the rejections is the positive pressure structure that is a *standard aerosol* valve, known operate on positive pressure (e.g. released via a valve mechanism as described in lines 21 and 22 on page 3, further explained on Page 4, lines 3-7, shown in Figures 12 and 13 and the positive pressure explained in lines 1-5 on Page 3 and Page 5, lines 5-20). With respect to “consumed under pressure”, this is not claimed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is noted that the beverage of Frutin is held under positive pressure sufficient to cause the beverage to be discharged as recited in the claims (e.g. released via a valve mechanism as described in lines 21 and 22 on page 3, further explained on Page 4, lines 3-7, shown in Figures 12 and 13 and the positive pressure explained in lines 1-5 on Page 3 and Page 5, lines 5-20).

29. With respect to claims 14, 17, and 18, Applicant argues that the beverage container of Frutin “has to be opened to the atmosphere before a beverage or liquid may be consumed” and the combination of references do not teach a dispenser that dispenses a beverage directly into the mouth. First, the claims do not recite the container does not have “to be opened to the atmosphere before a beverage or liquid may be consumed”. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988

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F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, presumably this “has to be opened to the atmosphere before a beverage or liquid may be consumed” implies that the container cannot be opened by the mouth. As stated in the rejection above, Rudick teaches the container of Frutin is capable of being opened in the mouth.

30. Regarding the rejections made under 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Denton et al., Applicant contends that Hoffman is directed to simply using solutions to eliminate mouth odor and Denton et al. does not cure the deficiencies of Hoffman because it is merely directed to a fluid delivery valve limited to use with people in protective suits (i.e. for laboratories, hospitals, pilots, etc.). Applicant's attention is directed to Column 2, lines 7-17 of Hoffman: one of the advantages of the invention is that *is* an ingestible beverage. Second, as discussed above in the rejection, Hoffman teaches the beverage is tea, coffee, root beer, or water, in a container. Third, Denton et al. teach a mouth operated valve to discharge a beverage from a container so that a consumer can drink hands free, which is not limited to people in “protective suits” because (1) Denton et al. set out to solve the problem of driving or riding a bike and operating a beverage container valve in addition (Column 1, lines 21-31) and (2) the valve of Denton is intended to be used with “conventional” beverage containers (Column 4, line 60 to Column 5, line 10).

31. Applicant further states that Hoffman does not teach the recited pressure and temperature. However, as stated in the rejection, Hoffman does teach the beverage is held in the container at 2-6 atmospheres (e.g. in Column 4). Furthermore, with respect to the temperature, as stated in the rejection, Hoffman provides guidance for selecting a

particular temperature by teaching the amount of oxygen dissolved at a given pressure depends on the particular temperature of the container and the amount of oxygen dissolved affects the ability of the beverage to control or eliminate halitosis, as well as the stored beverage's own susceptibility to microbial growth (Column 2, line 45 to column 3, line 7, Table 1). Thus, Hoffman teaches the particular storage temperature selected depends on (1) the type of beverage (e.g. root beer, which is normally chilled), (2) the desired level of oxygenation and effectiveness at controlling halitosis as compared to the amount of microbial risk (e.g. microbial risk for beverages would be greater at warmer temperatures).

32. Applicant also asserts that the beverage of Hoffman is not effervescent and the valve of Denton et al., which is relied for motivation for teaching the mouth operated valve, wouldn't be expected to withstand the pressure of 2.5 bars because it is held in place by friction. However, although Hoffman does not state it explicitly, Hoffman teaches a sparingly soluble gas (i.e. oxygen) dissolved in a beverage, which is thus effervescent. Hoffman teaches the pressurized beverage is in a bottle, and as stated in the rejection above, Denton et al. teach providing a mouth operated valve to discharge a beverage from a variety of pressurized containers, including bottles (bottles are disclosed in Column 1, lines 10-43 and Column 7, lines 5-27 as cited in the rejection above and previous Office Action), so that a consumer can drink hands free. It is also noted that for the bottle embodiment (e.g. Figure 10), Denton et al. states the valve is held in place by a thread fit, not friction. Thus, one would expect that since Hoffman use a bottle, Denton et al. teach a hands-free valve, for a variety of containers including

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bottles, one would elect the valve for bottles (e.g. the Embodiment depicted in Figure 10), which is held in place thread fitted and would withstand the pressure of the beverage.

33. With respect to claim 11, Applicant asserts that since the biting mechanism for Bergman is found in a bird, dog or gerbil cage, which is typically not under pressure, there is no motivation to combine with a beverage for halitosis. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as discussed in paragraphs 30-32 and stated in the rejection, the pressurized effervescent beverage, which includes water, stored in and dispensed from the container of *modified* Hoffman includes a mouth operated valve. Bergman teaches a water dispensing valve operated by biting, but additionally utilizes a button to control the amount dispensed based on the bite pressure applied to the button (English Abstract). Thus both teach a bite-valve for the same purpose: dispensing water, and Bergman teaches an improvement over modified Hoffman: a button for *controlling the dispensing amount* by bite pressure. Thus, one would have been motivated to select the bite valve of Bergman since the valve offers an improvement in that it allows one to control the amount of beverage dispensed by bite

pressure. One would have had some expectation of success since the valves of modified Hoffman and Bergman are in the same field of endeavor: dispensing water via a bite valve.

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 8:00AM-4:30PM M-F.

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Madsen
Examiner
Art Unit 1761



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